

Appln. No. 10/070,645

Attorney Docket No. 10541-1311

I. Listing of Claims

1-28. Cancelled.

29. (Previously Presented): A circuit for routing electrical signals in an internal combustion engine, the circuit comprising:

a main circuit portion formed in a throttle body of an air induction system of the internal combustion engine;

a plurality of circuit runner portions extending from the main circuit portion for interconnecting the main circuit portion with a plurality of engine components; and

a heat sink fixable to the throttle body and in contact with the main circuit portion and the plurality of circuit runner portions for dissipating heat generated in the circuit portions.

30. (Previously Presented): The circuit of claim 29 wherein the heat sink is comprised of a thermally conductive material.

31. (Previously Presented): The circuit of claim 29 wherein the main circuit portion further comprises a flexible substrate for supporting electrical conductors and electrical devices.

32. (Previously Presented): The circuit of claim 29 wherein the main circuit portion further comprises a flexible substrate and a rigid substrate for supporting electrical conductors and electrical devices.

33-34. (Cancelled).

35. (Previously Presented): The circuit of claim 29 further comprising a plurality of electrical conductors and a plurality of electrical devices wherein the plurality of electrical devices are mounted on the main circuit portion and the plurality of electrical conductors are affixed to the main circuit portion and the plurality of circuit runner portions.

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36. (Previously Presented): The circuit of claim 29 further comprising a plurality of electrical conductors and a plurality of electrical devices wherein the plurality of electrical devices and the plurality of electrical conductors are mounted throughout the main circuit portion and the plurality of circuit runner portions.